

# SC WaterWays

answering today's water resource challenges for future generations

## Floating Wetlands: Container Gardens for your Pond

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### Floating Wetlands

Floating wetlands essentially are container gardens that float on the surface of ponds and lakes. Using flowering plants that are native to South Carolina's wetlands, floating wetlands have the remarkable ability to manage water pollution and improve the appearance of the waterbody. As a result, they have tremendous potential for use in residential stormwater ponds which are managed not only to protect water quality but also to be attractive landscape features that enhance property values in the community. Floating wetlands can help manage excessive weed growth, algae blooms, and fish kills all the while adding value to the community by improving the look of ponds.

### How Do They Work?

A floating wetland is supported by a plastic and foam matrix that floats. Native wetland plants grow through this matrix with their roots suspended in the water. The plants absorb excess nutrients that could otherwise lead to aquatic weed growth, harmful algae blooms, and fish kills. These are common challenges in stormwater ponds because excess nutrients commonly come from lawn fertilizers, animal wastes, car wash soaps and other sources in the community. Floating wetlands also provide habitat for the beneficial microbes that feed on disease-causing bacteria and viruses. In addition to improving water quality, floating wetlands provide many other benefits including:

- food and shelter for fish, frogs, and invertebrates;
- shading which reduces water temperatures and submerged weed growth;
- carbon sequestering and removal of heavy metals;
- habitat for butterflies and song birds;
- reduction of wave energy.



*Floating wetland at installation.*



*Floating wetland after 2 months.*

## The Garden You Will Not Have To Water!

Floating wetlands provide several water quality benefits, but they also are very attractive. They support many plants that have showy flowers and dramatic foliage. For the avid gardener, floating wetlands provide a new garden habitat which allows them to explore a new palette of plants. For those with less gardening experience, floating wetlands provide a low maintenance, easy to grow container garden that will not need to be watered.

### Maintenance

Floating wetlands require very little maintenance compared to traditional landscaping. Once per year just before the springtime (January/February), the crowns of the plants should be cut and removed to prevent the decaying plant material from falling in the water and to encourage vigorous growth in the spring. Cut vegetation should be composted or otherwise disposed of and not placed in the water. Harvesting the plant material removes the nutrients that the plants captured from the water. Pesticides should not be applied to floating wetlands. If unwanted weeds take root in the floating wetland, they may need to be pulled by hand. Floating wetlands should remain in the water year-round. After several years, plants may become crowded and need to be divided to allow for new growth.



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## Suitable Plants

There are many very attractive plants that are suitable for floating wetlands. For best results and low maintenance, use perennial plants that are native to South Carolina wetlands and avoid trees and large shrubs. Native plants suitable for floating wetlands include the following:

Pickerselweed	<i>Pontederia cordata</i>
Arrowheads	<i>Sagittaria latifolia</i>
	<i>Sagittaria lancifolia</i>
Arrow Arum	<i>Peltandra virginicus</i>
Lizard's Tail	<i>Saururus cernuus</i>
Alligator Flag	<i>Thalia geniculata*</i>
Golden Canna	<i>Canna flaccida*</i>
White Star Sedge	<i>Dichromena colorata*</i>
Soft Rush	<i>Juncus effuses</i>
Bulrush	<i>Scirpus spp.*</i>
Louisiana Iris	<i>Iris (hexagonae group)</i>
Blue Flag Iris	<i>Iris virginica</i>
Yellow Flag Iris	<i>Iris pseudocoris</i>
Spider Lily	<i>Hymenocallis palmeri</i>
Mallow Hibiscus	<i>Hibiscus moscheutos*</i>
Swamp Sunflower	<i>Helianthus angustifolius*</i>
Cardinal Flower	<i>Lobelia cardinalis</i>
Bog Lily	<i>Crinum americanum</i>
River Oats	<i>Chasmanthium latifolium*</i>
Virginia Sweetspire	<i>Itea virginica*</i>
Carolina Bacopa	<i>Bacopa caroliniana</i>
Shade Mudflower	<i>Micranthemum umbrosum</i>

Ducks and geese may graze on floating wetlands. In waters that have large populations of waterfowl, consider planting duck-resistant plants. Each duck-resistant plant is marked with an asterisk (\*). Also, consider planting several small containers rather than one large garden. Ducks and geese are unable to climb onto small floating wetlands because they tip and wobble.

Many other plants will grow well in floating wetlands, but it is best to avoid plants that are not in this list because they may become invasive, especially illegal plants that are on the South Carolina Noxious Aquatic Plant list ([www.dnr.sc.gov/invasiveweeds](http://www.dnr.sc.gov/invasiveweeds)).